

Methodological approaches to relief role evaluation in soil erosion dynamics

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Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved. The article describes the method of some relief indicators estimation in soil erosion dynamics. Soil maps on the scale 1:10000 made for different time periods and topographic maps with the scale 1:25000 are used as the source materials. The areas of agricultural associations, selected according to a number of criteria act as the key areas. The calculation of relief indicators as well as the calculation of soil erosion integral index is performed by the means of GIS technology. A wide range of indices is used for further modeling of soil erosion development, depending on the relief factor. The generalized linear model (GLM) is used as the modeling tool.

Keywords

Catchment area, Digital relief model, GIS, Soil erosion, Soil map